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ning of each regular issue of the PCT Gazette.

(54) Title: THE ENZYMATIC METHOD OF MAKING 1,2-DIOL DERIVATIVES AND THEIR ESTERS WITH SUCCINE AN-
HYDRIDE

(57) Abstract: The present invention relates to a new process for the preparation of optically active alcohols represented by the
general formula 2 and their esters represented by the general formula 3 in scheme 1. In more detail, this invention relates to the
process for the preparation of optically active alcohols and their esters which are used as pharmaceutical intermediates by reacting
the hydroxyl group stereospecifically by lipase after adding racemic alcohols represented by the general formula 1 and succinic
anhydride as an acylating agent to the organic solvent. According to this invention, the primary hydroxyl group of 1,2-diols is
transformed by other functional group and the secondary hydroxyl group is esterified stereospecifically with succinic anhydride as
an acylating agent. Optically active alcohols and their esters of high optical purity in high yield can be produced by using succinic
anhydride as an acylating agent because alcohols can be separated from their esters more easily than those of other conventional
methods.

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AMENDED CLAIMS

[received by the International Bureau on 28 February 2005 (28.02.2005));
original claim 1 cancelled; original claim 2 unchanged (1 page)]

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CLAIMS

What is claimed is:

10 1. A process for preparing optically active alcohols represented by the general
formula 2 and their esters represented by the general formula 3 from racemic alcohols
represented by the general formula 1, whose secondary hydroxyl group is esterified
stereospecifically by lipase with succinic anhydride as an acylating agent in the
organic phase, wherein R is CH₃, N₃CH₂ or CH₃CH₂ and X is trityl, t-butyl, tosyl or
15 nosyl.

 2. A process for preparing optically active alcohols represented by the general
formula 2 and their esters represented by the general formula 3 from racemic alcohols
represented by the general formula 1, whose secondary hydroxyl group is esterified
20 stereospecifically by lipase with succinic anhydride as an acylating agent in the
organic phase, wherein R is ClCH₂ and X is trityl, t-butyl or nosyl.

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